

## Olivine Thermometers and Hygrometers

Reference	Name in ThermoBar	T-dependent?	P-dependent?	H <sub>2</sub> O-dependent?
Olivine-Liquid thermometry. Function "calculate_ol_liq_temp"				
Putirka (2008)	T_Put2008_eq19		✓	✗
	T_Put2008_eq21		✓	✓
	T_Put2008_eq22		✓	✓
Beattie (1993)	T_Beatt93_ol		✓	✗
	T_Beatt93_ol_HerzCorr		✓	✗
Sisson and Grove (1992)	T_Sisson1992		✓	✗
Pu et al. (2017)	T_Pu2017		✗	✗
Pu et al. (2021)	T_Pu2021		✓	✗
Olivine-Liquid hygrometers. Function "calculate_ol_liq_hygr"				
Gavrilenko et al. (2016)	H_Gavr2016	✗	✗	
Olivine-Spinel thermometry. Function "calculate_ol_sp_temp"				
Coogan et al. (2014)	T_Coogan2014		✗	✗
Wan et al. (2008)	T_Wan2008		✗	✗
Other Functions				
calculate_eq_ol_content(): calculates equilibrium olivine forsterite contents (with user-selected options for equilibrium criteria).				
calculate_ol_rhodes_diagram_lines(): Calculates equilibrium lines for a range of melt Mg#s contents (with user-selected options for equilibrium criteria).				

## Feldspar Thermometers, Barometers and Hygrometers

Phase	Reference	Name in ThermoBar	T-dependent?	P-dependent?	H <sub>2</sub> O-dependent?
Feldspar-Liquid thermometry. Function "calculate_fspar_liq_temp"					
Plag-Liq	Putirka (2008)	T_Put2008_eq23		✓	✓
		T_Put2008_eq24a		✓	✓
Kspar-Liq	Putirka (2008)	T_Put2008_eq24b		✓	✗
Feldspar-Liquid barometry. Function "calculate_fspar_liq_press"					
Plag-Liq	Putirka (2008)	P_Put2008_eq25	✓		✗
Feldspar-Liquid hygrometry. Function "calculate_fspar_liq_hygr"					
Plag-Liq	Putirka (2008)	H_Put2008_eq25b	✓	✓	
	Putirka (2005)	H_Put2005_eqH	✓	✗	
	Waters & Lange (2015)	H_Waters2015	✓	✓	
	Masotta et al. (2019)	H_Masotta2019	✓	✗	
Plagioclase-Alkali Feldspar thermometry. Function "calculate_plag_kspar_temp"					
Plag-Kspar	Putirka (2008)	T_Put2008_eq27a		✓	✗
		T_Put2008_eq27b		✓	✗
		T_Put_Global_2Fspar		✓	✗
Other Functions					
calculate_fspar_liq_press_temp: Iteratively solves P and T for fspar-liq pairs					
calculate_plag_kspar_temp_matching: Calculates P and T for all possible plag-kspar pairs					